Nature's New Open Access Option: A Dinosaur Lurches Toward the Future

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Nature recently caused a bit of a stir with its announcement of it's Guided Open Access option. As *Nature* explains it, "Guided Open Access (OA) is a ground-breaking initiative designed to make the process of publishing open access simpler, quicker, and more efficient. Ultimately our aim is to help authors publish their work in the most suitable journal with just a single submission." What caught most peoples' attention was the top end APC of €9,500 ($11,500), although the €2190 ($2,625) Editorial Assessment Charge also raised some eyebrows. Typical was Mihai Andrei whose post on the topic was aptly titled "Nature's €9,500 open-access trial is showing just how absurd scientific publishing has become." Madhukar Pai, writing in *Forbes* after interviewing over 20 scientists from around the world, including several who said that €9,500 was more than the annual salary of scientist in their country, concludes that *Nature* has, "elected to remain elite, exclusionary, and divorced from reality." *Nature*'s primary competitor, *Science*, explained it this way, "*Nature*'s author fee, €9500, is thought to be the highest of any journal. But the Nature Research publishing group says it is necessary to cover the costs of the full-time editors and others who produce *Nature* and its 32 other primary research journals." Actually, €9,500 could be viewed as cheap. In a 2013 article Philip Campbell, then the editor-in-chief of *Nature*, estimated his journal's internal costs at £20,000–30,000 ($30,000–40,000) per paper.

There is a nice explanation of *Nature*'s business strategy in Clarke & Esposito' November The Brief. They explain, quoting *Inside Higher Ed*, "*Nature* editors assessed about 57,000 manuscripts in 2019, sending about 10,000 to peer review. Roughly 4,500 were ultimately published in *Nature* or a Nature-branded research journal, leading to an 8 percent acceptance rate. Hundreds of staff members work on *Nature* and Nature-branded journals: almost 200 editors with doctorates, plus editorial assistants and art, production and copyediting staff members." What *Nature* is doing with the strategy is to in part to cover their overheads with the Editorial Assessment Charge and using it to capture manuscripts in the *Nature* journals portfolio. Clarke & Esposito argue that for Springer Nature, which has tried and failed to go public twice, "Convincing investors that they have figured out an OA long game is therefore essential. If investors do not believe in the strategy, SN may never fetch the price its current owners hope for (and that their creditors demand)."

So, what is going on here?

I would suggest that what we are seeing is a large legacy publisher, a dinosaur, lurching toward the open future of scholarly publishing. Springer Nature knows, as we all do, that the subscription business model is dying, but it is not yet prepared to give up the prestigious place of the *Nature* brand or to abandon its highly qualified and expensive editorial staff. The values and practices of the firm are deeply ingrained, and any adjustments in business strategy will need to accommodate them. So, the strategy is to cover costs and create an OA option within these constraints.

Nature has done the best they could to forge an OA strategy, but in the end, it probably won't work. A €9,500 APC is probably a bridge to far, even for getting your article published in *Nature*. Why not just skip the OA part and if you have to comply with a mandate, do it some other way. Besides this, as Dorothy Bishop points out in *Times Higher Education*, guided OA with its upfront editorial review fee, "It is too complicated and would seem to create a conflict of interest whereby the publisher benefits financially by recommending most papers for the less selective journals." She also suggests there may be a "reviewer mutiny" when an explicit reviewing fee is charged.

The core problem in that scholarly journal publishing has been and still largely is based on exclusivity and scarcity. In the digital networked world, it should be based on openness and abundance. As Michael Eisen, one of the founders of *PLOS* and now Editor in Chief at *eLife*, said in a series of tweets in July, "I think journals are an anachronism — a product of the historical accident that the printing press was invented before the Internet. I want to get rid of them. More specifically, I want to get rid of pre-publication peer-review and the whole 'submit – review – accept/reject – repeat' paradigm through which we evaluate works of science and the scientists who produced them. This system is bad for science and bad for scientists." He goes on to say, "A clear alternative is emerging – we should let scientists publish their work when they want to on @bioxivpreprint or the equivalent, and review and curate these works in many different ways, throughout the useful lifetime of a paper." Eisen announced a new strategy for eLife, "From July 2021 *eLife* will only review manuscripts already published as preprints, and will focus its editorial process on producing public reviews to be posted alongside the preprints." *eLife* can chart this new path in part because it is a new organization unencumbered by long entrenched print-based values of an academic publisher like *Nature*. Also, critically *eLife*'s business model is based on financial support from research funders who value openness and not on subscriptions.

In the digital networked world we live in, scholarly communications will inevitably be reconfigured so that it is based in openness and probably on funding mechanisms that treat the communication of research results in the same way that the research itself is treated — that is as a public good. This will require reworking the whole of the research communication system and the infrastructure that supports it in a way that is something like what Eisen imagines. The path that *eLife* is on leads to that future. *Nature*, on the other hand, appears to be more like a dinosaur heading towards a dead end.